

An example of content – Technical Description

This example uses the Apple Peeler-Corer-Slicer as the mechanism to be described in terms of its physical and functional properties. It follows the organizational structure outlined in the guide to the assignment where:

Apple peeler-corer-slicer is the **mechanism**

Frame, Rod Assembly . . . are the **assemblies** and

Trident . . . are the **parts**.

At each level you should be able to recognise the **naming, defining, describing and illustrating** process taking place.

This is an example only - not all elements of the description are included and some portions of the text have been shortened for efficiency in presenting the ideas.

1.0 THE APPLE PEELER-CORER-SLICER (naming)

The apple peeler-corer-slicer is a hand-operated mechanical device used to process (peel, core and slice) hard fruit for preservation. (defining)

It is composed of six main elements:

- the frame assembly
- threaded rod assembly
- peeler assembly
- drive assembly
- coring blade, and
- ejector arm (describing)

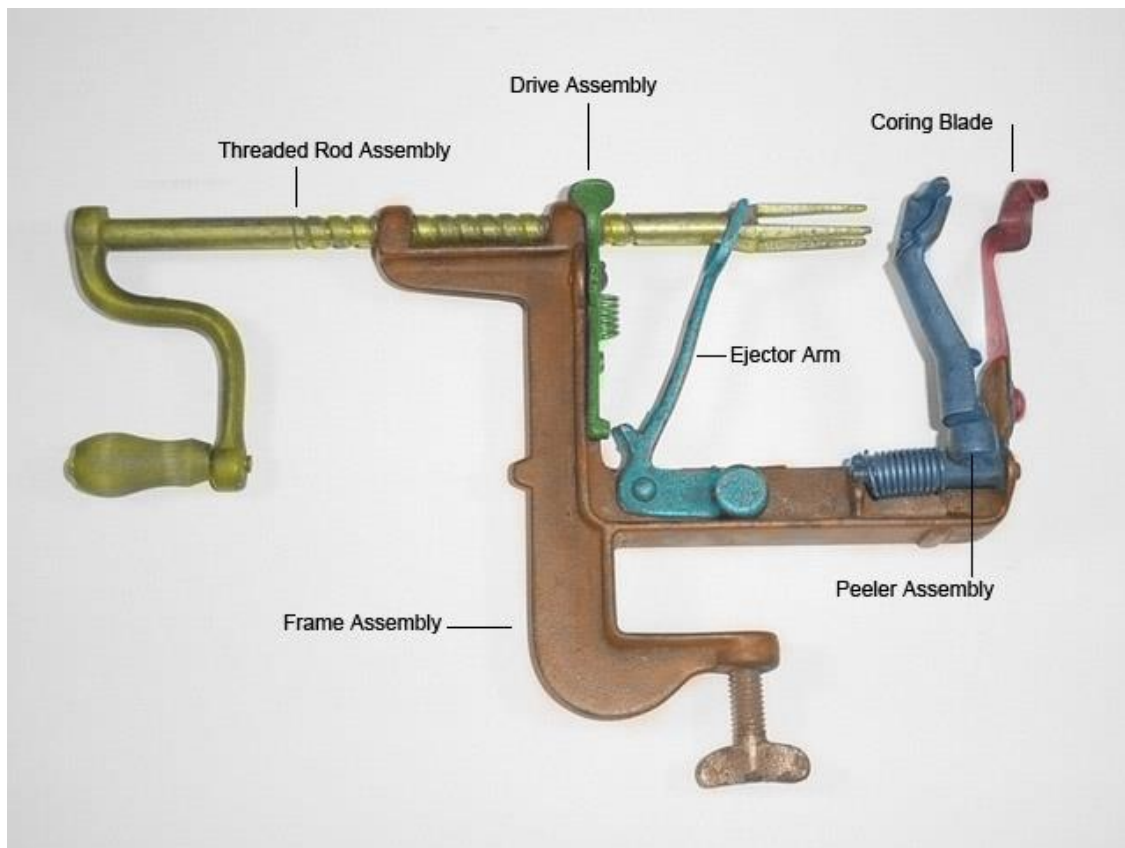


Figure 1: Main elements of the Apple Peeler-Corer-Slicer

(illustrating)

1.1 Frame Assembly (note the change in the font treatment for the section headings)

The frame is the main structural element of the mechanism to which all other elements are attached and supported.

It is a cast steel structure measuring 18 x 14 cm. (see Appendix A for detailed plans) A wingnut (7 mm x 2 cm) is used to secure the frame to the fruit processing working surface.



Figure 2: Frame assembly

This is an example of a single-element assembly-level description. Frames are major elements and are therefore included in the second level of description rather than the third (part) level.

1.2 Threaded Rod Assembly

The threaded rod assembly supports the hard fruit during the peeling, coring and slicing and is the primary means of driving the fruit through the mechanism.

It is composed of four main parts:

- threaded rod
- handle
- grip
- trident

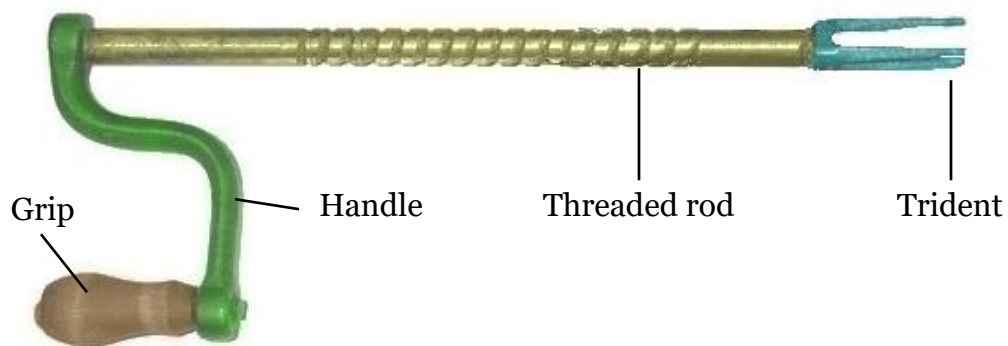


Figure 3: Parts of the threaded rod assembly

This is an example of a multi-element assembly-level description.

1.3 Cycle of Operation

The cycle of operation commences with the retraction of the threaded rod assembly. The fruit to be processed is impaled on the trident to hold it securely in place. The drive assembly gear tooth is then engaged with the threads on the threaded rod. When the handle is rotated the fruit is driven forward into the peeler assembly where the outer skin of the fruit is removed as a continuous ribbon of peel. As the fruit passes through the coring blade the central stem and seed pod of the fruit is separated from the outer flesh and the remainder is cut into a spiral ready to be preserved. When the peeling/coring/slicing process is complete the drive assembly gear tooth is disengaged and the threaded rod is withdrawn. During this action the core is ejected from the trident by the ejector arm. The mechanism is then ready for the next cycle of operation.